IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Motoharu SEIKI et al.

Serial No. NEW

Filed December 12, 2000

NOVEL PROTEIN AND MONOCLONAL ANTIBODY SPECIFIC THERETO (Rule 1.53(b) Divisional Application of Serial No. 09/000,041, Filed February 20, 1998)

Attn: Application Branch

Attorney Docket No. 2000-1617

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEE FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975.



INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, DC 20231

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicants request consideration of (X) the references listed on the attached Form PTO-1449 and/or () the additional information Sir: identified below in paragraph 4. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial Number 09/000,041.

- This Information Disclosure Statement is submitted: 1.
 - (X) within 3 months of the filing date of the above-identified application, or () within 3 months of entry into National stage prosecution of an International application, or () before the mailing date of the first Office Action on the merits, and thus:
 - no certification and/or fee is required. (X)

after the events of above paragraph 1a and prior to the mailing date of a final b. 0 Office Action or Notice of Allowance, and thus: the certification of paragraph 2 below is provided, 0 a fee of \$180.00 is enclosed. 0 after the mailing date of a final Office Action or a Notice of Allowance and 0 C. prior to payment of the issue fee, and thus: the certification of paragraph 2 below is provided, 0 the Petition of paragraph 3 below is provided and \$180.00 fee therefore is 0 enclosed. It is hereby certified 2. that each item of information contained in this Information Disclosure Statement was 0 cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the Statement, or that no item of information contained in the Information Disclosure Statement was 0 cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement. Petition under 37 CFR 1.97 for consideration of this Information Disclosure 0 3. Statement is hereby made. Consideration of the following additional information (including any co-pending or 0 4. abandoned U.S. application, prior uses and/or sales, etc.) is requested: For each non-English language reference listed on the attached Form PTO-1449: 5. 0 reference is made to an English language translation or abstract submitted 0 herewith, and/or - 2 -

- () reference is made to a foreign patent office search report (in the English language) submitted herewith, and/or
- () reference is made to an English language translation of a foreign patent office search report submitted herewith, and/or
- () reference is made to the concise explanation contained in the specification of the present application at page(s), and/or
- () reference is made to the concise explanation set forth below:
- 6. (X) Applicants also offer the following comments about some of the cited references for the Examiner's consideration:
 - (1) H. Azzam, et al., "Association of MMP-2 Activation Potential With Metastatic Progression in Human Breast Cancer Cell Lines Independent of MMP-2 Production," Journal of the National Cancer Institute, Vol, 85, No. 21, November 3, 1993, pages 1758-1764.
 - (2) P.D. Brown, et al., "Expression of activated gelatinase in human invasive breast carcinoma," Clinical & Experimental Metastasis, Vol. 11, No. 2, 1993, pages 183-189.

Documents (1) & (2) are related to an activator for MMP-2 (see page 4 at lines 7 to 8 of the English text).

(3) A. Strongin, et al., "Plasma Membrane-dependent Activation of the 72-kDa Type IV Collagenase Is Prevented by Complex Formation with TIMP-2*," The Journal of Biological Chemistry, Vol. 268, No. 19, July 5, 1993, pages 14033-14039.

Documents (3) discloses that an activator for MMP-2 is associated with membrane (see page 4 at line 12 of the English text).

(4) T. Takino, et al., "Identification of the Second Membrane-type Matrix Metalloproteinase (MT-MMP-2) Gene from a Human Placenta cDNA Library," The Journal of Biological Chemistry, Vol. 270, No. 39, September 29, 1995, pages 23013-23020.

Document (4) was published after the priority date on July 14, 1995 (see page 6 at the 10th line from the bottom of the English text).

7. (X) Also enclosed is a copy of the International Search Report citing two of the references provided in the accompanying PTO-1449.

Respectfully submitted,

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LC/gtn Washington, D.C. Telephone (202) 721-8200 December 12, 2000